

The Advisory Action appears to repeat the arguments in the Final Rejection of July 22, 2009 without addressing Applicants' Response of September 22, 2009, in which the deficiencies of the rejection were carefully explained. The Advisory Action argues as follows:

1) Sapper, although not a paste, discloses mixing all the ingredients at once, so that it is prima facie obvious that changing the mixing order would teach the presently claimed paste. 10/08/2009 Advisory Action page 2, para. 1.

2) Since both Sapper and Bergfried disclose "pigments" the fact that Bergfried discloses a metal oxide whereas Sapper discloses a metallic pigment is irrelevant to patentability of the present paste. 10/08/2009 Advisory Action page 2, para. 2.

3) Bergfried discloses 40% to 60% pigment, which overlaps Applicants' claimed range of 15% to 40%. 10/08/2009 Advisory Action page 2, para. 2.

4) Because Bergfried mentions adding binders to the paste, the binders already in the paste do not exist. 10/08/2009 Advisory Action page 2, para. 3.

5) Applicants have failed to provide any evidence that "the paste of the combined teachings of Sapper and Bergfried fail to have the stability as applicant set forth in the instant application." 10/08/2009 Advisory Action page 2, para. 3.

6) The claimed recitation of paste stability is accorded no patentable weight because it is in the preamble. 10/08/2009 Advisory Action page 2, para. 4.

7) The Examiner disagrees with Applicants' argument that "all the preferred ranges and examples [in Bergfried] direct one of ordinary art to use an amount higher than applicants' claimed range." 10/08/2009 Advisory Action page 2, para. 5.

In response to the above arguments, Applicants will refer to the section of Applicants previous Response of September 22, 2009, in which the deficiencies and mistakes in the above arguments were clearly pointed out. The following discussion uses numbers corresponding to the above-numbered arguments in the Advisory Action:

1) *Sapper, which teaches a composition for a coating composition, cannot teach the present paste composition.* 09/22/2009 Applicants Response page 7, para. 2, to page 9, para. 2.

Applicants' previous response pointed out that the coating composition of Sapper does not even need to be made from a paste. In fact, there is no teaching that Sapper's composition was made from a paste. Therefore, Sapper does not remotely teach or suggest a metal pigment paste that solves the problem of long-term stability. Furthermore, it is important to note that Sapper teaches away from the present paste composition. In particular, Sapper actually teaches that the nonassociative thickener is not part of a metallic paste.

Thus, Applicants respectfully submit that Sapper, as a whole, does not teach or suggest Applicants' pigment paste. Sapper does not teach, suggest, motivate, or even allude to an aqueous metallic paste, let alone one that is free from binders and grinding resins such as the one in Applicants' independent claim 1. Sapper does not provide any basis for arriving at Applicants' independent claim 1. Rather, Sapper specifically teaches away from adding a nonassociative thickener to a paste composition, let alone a metallic paste that does not have a binder or grinding resin.

In this regard, it is held that "[a] *prima facie* case of obviousness may also be rebutted by showing that the art, in any material respect, teaches away from the claimed invention." *In re Geisler*, 116 F.3d 1465, 1471, 43 USPQ2d 1362, 1366 (Fed. Cir. 1997). For at least this reason, Applicants respectfully assert that Sapper cannot be used as a prior art reference because it teaches away from the present independent claim 1, i.e., Sapper teaches that the associative thickener is not added to a paste, but rather to the final coating composition. These deficiencies are not remedied by Bergfried or by falsely contending that Applicants' paste merely represents an "order of mixing."

2) *Bergfried, which teaches a paste composition, teaches away from the present paste composition in terms of ingredients.* 09/22/2009 Applicants Response page 9, para.3, to page 10, para. 3.

Applicants noted, in their previous response, that equating Bergfried's electrically conductive pigment based on metal oxides to Applicants' metallic pigment was unreasonable, because it is generally known in the art that when it comes to aqueous solution behavior and stability, an electrically conductive pigment based on metal oxides is substantially different from a

metallic pigment. The courts have held that “[i]n order to rely on equivalence as a rationale supporting an obviousness rejection, the equivalency must be recognized in the prior art....” *In re Ruff*, 256 F.2d 590, 118 USPQ 340 (CCPA 1958). It is well known that many aspects of a compound and/or particle are critical in the ability for a compound and/or particle to disperse in a medium, such as polarity, particle size, surface charge, geometry, swellability, etc. The Examiner has not provided any reasonable basis as to why two chemically distinct species would be equivalent in dispersion behavior or stability based on their conductivity. The Examiner has not provided any technical or factual basis to support this assertion.

3 and 7) *Bergfried, which teaches a paste composition, does not teach the relative amounts of the ingredients in the present invention, even assuming arguendo that the pigments were equivalent.* 09/22/2009 Applicants Response page 10, para.4, to page 11, last para.

The Examiner incorrectly states that Applicants are arguing that Bergfried discloses a different amount of pigment than Bergfried, whereas the amounts overlap. The Examiner also contends that Applicants are arguing the fact that “all the preferred ranges and examples [in Bergfried] direct one of ordinary art to use an amount higher than applicants’ claimed range.”

In fact, these statements are a distortion of Applicants’ argument. Applicants pointed out that there is no teaching or suggestion in the cited prior art to use 15 to 40% by weight of at least one metal pigment, preferably 22%, in combination with 0.45% to 0.75% of a specified non-associative thickener, as required by present claim 1. In contrast, Bergfried requires 40-60% of an “electrically conductive pigment based on metal oxides” in combination with an amount of thickener that can easily be outside Applicants’ claimed range and, in fact, is considerably outside Applicants’ claimed range in Bergfried’s examples. Applicants respectfully submit that no such reason has been identified by the Examiner as to why one with ordinary skill in the art would change Bergfried's 40 to 60% to Applicants' 15 to 40% by weight and, at the same time, lower the relative amounts of the thickener and amine.

4. *Bergfried, which teaches a paste composition, does not teach exclusion of a dispersing resin or resin, but rather its necessity.* 09/22/2009 Applicants Response page 12, first para., to page 14, first para.

The Advisory Action, on page 2, para. 3, apparently argues that because Bergfried mentions later adding binders to the paste, the binders already in the paste do not exist.

The present invention (as recited in claim 1) requires that “the aqueous pigment paste is free from binders, including grinding resins used for dispersing pigments.” In contrast, Bergfried uses a binder or grinding resin for dispersing pigment. As indicated in claim 1 of Bergfried, the composition of Bergfried includes 2 to 4.9 percent of a terpolymeric, anionic polyacrylate, which satisfies the definition of a binder and grinding resin, as discussed at length in Applicants’ previous responses.

In fact, Bergfried teaches away from the present invention by specifically stating, not only that not just any polyacrylate dispersant is sufficient, but also that a particular kind of polyacrylate dispersant is required. In fact, based on the experimental results shown in the table on page 8 of Bergfried, a certain type of terpolymer binder (dispersing resins 2 or 4) is required, compared to the dispersing resins of formulations 1, 3, and 6. Finally, unless this kind of binder is used, the compositions are unstable after only 1 hour, whereas with the binder required by Bergfried, and excluded by the present invention, the stability is shown to be achieved for merely 10 hours, as compared to 3 months achieved using the present invention, as stated on page 2 of the present specification and as required by present claim 1. Clearly, Bergfried teaches away from the present invention with respect to the binder or dispersing (grinding) resin.

Furthermore, the terpolymer of Bergfried is, in fact, used for grinding a pigment. Bergfried uses milling (grinding) or its equivalent to divide pigment agglomerates (page 4, lines 13-22). Thus, any way one looks at it, the terpolymer of Bergfried is a grinding resin, whether of the type used for dispersion alone or of the type used for both grinding and dispersion.

5 and 6). *Neither Bergfried nor Sapper alone or in combination teach a paste that obtains the claimed properties of the present paste composition.* 09/22/2009 Applicants Response page 14, para 4, to page 15, para. 2.

The Advisory Action argues that Applicant has failed to provide any evidence that “the paste of the combined teachings of Sapper and Bergfried fail to have the stability as applicant set forth in the instant application” and, at the same time, the Advisory Action argues that the recitation of paste stability is accorded no patentable weight because it is in the preamble.

Applicants, in the previous response, noted that, since neither Sapper nor Bergfried teach the present composition, the properties are not inherent in anything in Bergfried or Sapper, alone or in combination.

Moreover, Applicants noted that the original specification disclosed that the metallic paste of the present invention is storable for up to three months without settling and without the formation of inhomogenities or coagulum (page 6, lines 8-11 and working example on page 20, lines 14-17). In distinct contrast, there is no evidence that the metal oxide paste of Bergfried is stable for a period greater than about 10 hours. In fact, small variations in the paste formulation of Bergfried (as shown by Comparative Examples 1 and 6) result in the composition becoming unstable in less than one hour. Yet the difference between Examples 2, 4, and 5 of Bergfried from the unstable Comparative Examples 1, 3, and 6 is less than the difference between Examples 2, 4, and 5 of Bergfried and the composition of the present invention. Thus, the present inventive properties are wholly unpredictable, based on the evidence in Bergfried.

Furthermore, the Applicants Response of September 22, 2009 (on page 19, para. 1, to page 20, para. 2) provide completely un rebutted reasons why the claimed recitation of paste stability is entitled to weight. The present invention claims, “An aqueous pigment paste that is stable transportable, and storable for up to three months. [Emphasis added.] This is clearly a functional limitation in terms of the capacity of the paste. MPEP 2111.02 states that the determination of whether a preamble limits a claim is on a case-by-case basis in light of the facts of each case.

In view of the above, Applicants respectfully submit that the Advisory Action has not provided any response to Applicants analysis of the prior art, including the serious deficiencies in the prior art. Instead the Advisory Action merely summarizes the previous rejection, in apparent disregard of Applicants' relevant arguments.

In addition to the above, Applicants' previous response clearly pointed out that the Final Office Action was wrong as a matter of law and wrong on the facts. 09/22/2009 Applicants' Response page 15, para. 3, to page 20, second para. These mistakes are concisely summarized below:

- 1. The Final Office Action, after noting that Sapper is not directed to a paste, incorrectly argues that a paste composition is the same as the order of the mixing of a final paint composition.*
- 2. The Final Office Action incorrectly states that a paste composition is obvious merely because a coating composition that contains the same ingredients is obvious. This ignores the art of paste compositions.*
- 3. The Final Office Action incorrectly states that Bergfried discloses a pigment composition without binder or grinding resin.*
- 4. The Final Office Action incorrectly assumes metallic particles are equivalent to non-metallic particles with respect to their dispensability or stability in a paste.*
- 5. The Final Office Action fails to respond to the fact that the prior art does not teach the claimed combination of ranges of ingredients, which is highly significant for a stable paste formulation.*
- 6. The Final Office Action incorrectly states that the prior art teaches the same stability as Applicant's paste.*
- 7. The Final Office Action incorrectly refuses to give any patentable weight to the recited stability and storability of the paste.*

Applicants respectfully submit that the Application and pending claims are patentable in view of the foregoing remarks and the more extended remarks in Applicants' Amendment of September 22, 2009 and Applicants' Response of September 22, 2009. A Notice of Allowance is respectfully requested. As always, the Examiner is encouraged to contact the Undersigned by telephone if direct conversation would be helpful.

Respectfully Submitted,

/MaryEGolota/

Mary E. Golota
Registration No. 36,814
Cantor Colburn LLP
(248) 524-2300

October 22, 2009

CORRESPONDENCE ADDRESS ONLY

BASF CORPORATION
1609 Biddle Avenue
WYANDOTTE, MI 48192
Customer No. 77224
MEG/CPK